

Rod SWARZ

1641SWARZ

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RAW SEQUENCE LISTING
PATENT APPLICATION US/08/913,430B

DATE: 09/24/1999
TIME: 08:52:01

Input Set: H913430B.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

1 <110> APPLICANT: Walker, John
2 Lee, Rogan
3 Dougherty, Stephen W.
4 <120> TITLE OF INVENTION: Antigen Composition Against Mycoplasma
5 <130> FILE REFERENCE: U-011415-0
6 <140> CURRENT APPLICATION NUMBER: US/08/913,430B
7 <141> CURRENT FILING DATE: 1997-12-09
8 <150> EARLIER APPLICATION NUMBER: PCT/AU96/00149
9 <151> EARLIER FILING DATE: 1996-03-15
10 <150> EARLIER APPLICATION NUMBER: PN 1789
11 <151> EARLIER FILING DATE: 1995-03-16
12 <160> NUMBER OF SEQ ID NOS: 18
13 <170> SOFTWARE: PatentIn Ver. 2.0 - beta
14 <210> SEQ ID NO 1
15 <211> LENGTH: 1782
16 <212> TYPE: DNA
17 <213> ORGANISM: Mycoplasma hyopneumoniae
18 <400> SEQUENCE: 1
19 atgaaaaaaa tgccactata ccagaggaaa gagcagtata taaaataatt aaaattacat 60
20 tttcttcatt tgcgccagaa tttttaagaa ttagtacatt aaaaagtaga acaaaagtta 120
21 ttaatgtaaa cattagcgca atccttaaga aaaaattaaa agttttatct atttttttta 180
22 atcgaaatcc aaccaggcat aaatctttgt cagtatttat caagtcggta ttttttcatt 240
23 atttctacta aaatattatt tgaatttgca ttttccataa tctaaaattt tacatttttt 300
24 tataacaatt tttaaaaatt actctttaat ttatagtatt tttttatttt ttagtctaaa 360
25 ttataaaatt atcttgaatt ttatttgaat ttttataatt tagtactaaa aaatacaaat 420
26 attttttcct attctaagaa aaattcattt tttaaaaaaa attgattttt atagtataat 480
27 ttgtttgtat aattgaatta acttgatttg aaagggaaca aaatgaaaaa aatgcttaga 540
28 aaaaaattct tgtattcatc agctatttat gcaacttcgc ttgcatcaat tattgcattt 600
29 gttgcagcag gttgtggaca gacagaatca ggttcaactt ctgattctaa accacaagcc 660
30 gagacgctaa aacataaagt aagtaatgat tctattcgaa tagcactaac cgatccggat 720
31 aatcctcgat gaattagtgc ccaaaaagat attatttctt atgttgatga aacagaggca 780
32 gcaacttcaa caattacaaa aaaccaggat gcacaaaata actgactcac tcagcaagct 840
33 aatttaagcc cagcgccaaa aggatttatt attgcccctg aaaatggaag tggagttgga 900
34 actgctgtta atacaattgc tgataaagga attccgattg ttgcctatga tcgactaatt 960
35 actggatctg ataaatatga ttggtatgtt tcttttgata atgaaaaagt tggatgaatta 1020
36 caaggtcttt cacttgctgc ggggtctatta ggaaaagaag atggtgcttt tgattcaatt 1080
37 gatcaaata atgaatatct aaaatcacat atgccccag agacaatttc tttttatata 1140
38 atcgcggtt ccaagatga taataattcc caatattttt ataatggtgc aatgaaagta 1200
39 cttaaagaat taatgaaaaa ttcgcaaaat aaaataattg atttatctcc tgaaggcgaa 1260
40 aatgctgttt atgtcccagg atgaaattat ggaactgccg gtcaaagaat ccaatctttt 1320
41 ctaacaatta acaaagatcc agcaggtggt aataaaatca aagctgttggt ttcaaaacca 1380
42 gcttctattt tcaaaggatt tcttgcccca aatgatggaa tggccgaaca agcaatcacc 1440
43 aaattaaaac ttgaagggtt tgatacccaa aaaatctttg taactcgtca agattataat 1500
44 gataaagcca aaacttttat caaagacggc gatcaaaata tgacaattta taaacctgat 1560

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45 aaagtttttag gaaaagttgc tgttgaagtt cttcggggttt taattgcaaa gaaaaataaa 1620
46 gcatctagat cagaagtcga aaacgaacta aaagcaaaac taccaaatat ttcattttaa 1680
47 tatgataatc aaacatataa agtacaaggt aaaaatatta atacaatttt agtaagtcca 1740
48 gtaattgtta caaaagctaa tgttgataat cctgatgcct aa 1782

49 <210> SEQ ID NO 2

50 <211> LENGTH: 419

51 <212> TYPE: PRT

52 <213> ORGANISM: Mycoplasma hyopneumoniae

53 <400> SEQUENCE: 2

54 Met Lys Lys Met Leu Arg Lys Lys Phe Leu Tyr Ser Ser Ala Ile Tyr
55 5 10 15
56 Ala Thr Ser Leu Ala Ser Ile Ile Ala Phe Val Ala Ala Gly Cys Gly
57 20 25 30
58 Gln Thr Glu Ser Gly Ser Thr Ser Asp Ser Lys Pro Gln Ala Glu Thr
59 35 40 45
60 Leu Lys His Lys Val Ser Asn Asp Ser Ile Arg Ile Ala Leu Thr Asp
61 50 55 60
62 Pro Asp Asn Pro Arg Trp Ile Ser Ala Gln Lys Asp Ile Ile Ser Tyr
63 65 70 75 80
64 Val Asp Glu Thr Glu Ala Ala Thr Ser Thr Ile Thr Lys Asn Gln Asp
65 85 90 95
66 Ala Gln Asn Asn Trp Leu Thr Gln Gln Ala Asn Leu Ser Pro Ala Pro
67 100 105 110
68 Lys Gly Phe Ile Ile Ala Pro Glu Asn Gly Ser Gly Val Gly Thr Ala
69 115 120 125
70 Val Asn Thr Ile Ala Asp Lys Gly Ile Pro Ile Val Ala Tyr Asp Arg
71 130 135 140
72 Leu Ile Thr Gly Ser Asp Lys Tyr Asp Trp Tyr Val Ser Phe Asp Asn
73 145 150 155 160
74 Glu Lys Val Gly Glu Leu Gln Gly Leu Ser Leu Ala Ala Gly Leu Leu
75 165 170 175
76 Gly Lys Glu Asp Gly Ala Phe Asp Ser Ile Asp Gln Met Asn Glu Tyr
77 180 185 190
78 Leu Lys Ser His Met Pro Gln Glu Thr Ile Ser Phe Tyr Thr Ile Ala
79 195 200 205
80 Gly Ser Gln Asp Asp Asn Asn Ser Gln Tyr Phe Tyr Asn Gly Ala Met
81 210 215 220
82 Lys Val Leu Lys Glu Leu Met Lys Asn Ser Gln Asn Lys Ile Ile Asp
83 225 230 235 240
84 Leu Ser Pro Glu Gly Glu Asn Ala Val Tyr Val Pro Gly Trp Asn Tyr
85 245 250 255
86 Gly Thr Ala Gly Gln Arg Ile Gln Ser Phe Leu Thr Ile Asn Lys Asp
87 260 265 270
88 Pro Ala Gly Gly Asn Lys Ile Lys Ala Val Gly Ser Lys Pro Ala Ser
89 275 280 285
90 Ile Phe Lys Gly Phe Leu Ala Pro Asn Asp Gly Met Ala Glu Gln Ala
91 290 295 300
92 Ile Thr Lys Leu Lys Leu Glu Gly Phe Asp Thr Gln Lys Ile Phe Val
93 305 310 315 320
94 Thr Arg Gln Asp Tyr Asn Asp Lys Ala Lys Thr Phe Ile Lys Asp Gly

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PATENT APPLICATION US/08/913,430B

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Input Set: H913430B.RAW

95 325 330 335
 96 Asp Gln Asn Met Thr Ile Tyr Lys Pro Asp Lys Val Leu Gly Lys Val
 97 340 345 350
 98 Ala Val Glu Val Leu Arg Val Leu Ile Ala Lys Lys Asn Lys Ala Ser
 99 355 360 365
 100 Arg Ser Glu Val Glu Asn Glu Leu Lys Ala Lys Leu Pro Asn Ile Ser
 101 370 375 380
 102 Phe Lys Tyr Asp Asn Gln Thr Tyr Lys Val Gln Gly Lys Asn Ile Asn
 103 385 390 395 400
 104 Thr Ile Leu Val Ser Pro Val Ile Val Thr Lys Ala Asn Val Asp Asn
 105 405 410 415
 106 Pro Asp Ala
 107 <210> SEQ ID NO 3
 108 <211> LENGTH: 25
 109 <212> TYPE: PRT
 110 <213> ORGANISM: Mycoplasma hyopneumoniae
 111 <220> FEATURE:
 112 <221> NAME/KEY: Unsure
 113 <222> LOCATION: (3)
 114 <223> OTHER INFORMATION: Undetermined
 115 <400> SEQUENCE: 3
 116 Ala Gly Xaa Gly Gln Thr Glu Ser Gly Ser Thr Ser Asp Ser Lys Pro
 117 5 10 15
 118 Gln Ala Glu Thr Leu Lys His Lys Val
 119 20 25
 120 <210> SEQ ID NO 4
 121 <211> LENGTH: 29
 122 <212> TYPE: PRT
 123 <213> ORGANISM: Mycoplasma hyopneumoniae
 124 <400> SEQUENCE: 4
 125 Thr Ile Tyr Lys Pro Asp Lys Val Leu Gly Lys Val Ala Val Glu Val
 126 5 10 15
 127 Leu Arg Val Leu Ile Ala Lys Lys Asn Lys Ala Ser Arg
 128 20 25
 129 <210> SEQ ID NO 5
 130 <211> LENGTH: 16
 131 <212> TYPE: PRT
 132 <213> ORGANISM: Mycoplasma hyopneumoniae
 133 <400> SEQUENCE: 5
 134 Ala Glu Gln Ala Ile Thr Lys Leu Lys Leu Glu Gly Phe Asp Thr Gln
 135 5 10 15
 136 <210> SEQ ID NO 6
 137 <211> LENGTH: 14
 138 <212> TYPE: PRT
 139 <213> ORGANISM: Mycoplasma hyopneumoniae
 140 <400> SEQUENCE: 6
 141 Lys Asn Ser Gln Asn Lys Ile Ile Asp Leu Ser Pro Glu Gly
 142 5 10
 143 <210> SEQ ID NO 7
 144 <211> LENGTH: 14

W--X

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RAW SEQUENCE LISTING
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Input Set: H913430B.RAW

145 <212> TYPE: PRT
146 <213> ORGANISM: Mycoplasma hyopneumoniae
147 <220> FEATURE:
148 <221> NAME/KEY: Unsure
149 <222> LOCATION: (3)
150 <223> OTHER INFORMATION: Undetermined
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152 Ala Gly Xaa Trp Ala Lys Glu Thr Thr Lys Glu Glu Lys Ser
153 5 10
154 <210> SEQ ID NO 8
155 <211> LENGTH: 10
156 <212> TYPE: PRT
157 <213> ORGANISM: Mycoplasma hyopneumoniae
158 <400> SEQUENCE: 8
159 Ala Trp Val Thr Ala Asp Gly Thr Val Asn
160 5 10
161 <210> SEQ ID NO 9
162 <211> LENGTH: 21
163 <212> TYPE: PRT
164 <213> ORGANISM: Mycoplasma hyopneumoniae
165 <400> SEQUENCE: 9
166 Ala Ile Val Thr Ala Asp Gly Thr Val Asn Asp Asn Lys Pro Asn Gln
167 5 10 15
168 Trp Val Arg Lys Tyr
169 20
170 <210> SEQ ID NO 10
171 <211> LENGTH: 15
172 <212> TYPE: PRT
173 <213> ORGANISM: Mycoplasma hyopneumoniae
174 <220> FEATURE:
175 <221> NAME/KEY: Unsure
176 <222> LOCATION: (11)
177 <223> OTHER INFORMATION: Undetermined
178 <220> FEATURE:
179 <221> NAME/KEY: VARIANT
180 <222> LOCATION: (12)
181 <223> OTHER INFORMATION: Residue may be Asn or Leu
182 <220> FEATURE:
183 <221> NAME/KEY: VARIANT
184 <222> LOCATION: (13)
185 <223> OTHER INFORMATION: Residue may be Met or Val
W--> 186 <400> SEQUENCE: 10
187 Met Lys Leu Ala Lys Leu Leu Lys Gly Phe Xaa Xaa Xaa Ile Lys
188 5 10 15
189 <210> SEQ ID NO 11
190 <211> LENGTH: 15
191 <212> TYPE: PRT
192 <213> ORGANISM: Mycoplasma hyopneumoniae
193 <220> FEATURE:
194 <221> NAME/KEY: VARIANT

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195 <222> LOCATION: (4)
196 <223> OTHER INFORMATION: Residue may be Phe or Ile
197 <220> FEATURE:
198 <221> NAME/KEY: VARIANT
199 <222> LOCATION: (5)
200 <223> OTHER INFORMATION: Residue may be Arg or Glu
201 <220> FEATURE:
202 <221> NAME/KEY: VARIANT
203 <222> LOCATION: (7)
204 <223> OTHER INFORMATION: Residue may be Val or Ala
205 <220> FEATURE:
206 <221> NAME/KEY: VARIANT
207 <222> LOCATION: (11)
208 <223> OTHER INFORMATION: Residue may be Gln or Ala
209 <220> FEATURE:
210 <221> NAME/KEY: Unsure
211 <222> LOCATION: (12)
212 <223> OTHER INFORMATION: Undetermined
213 <220> FEATURE:
214 <221> NAME/KEY: VARIANT
215 <222> LOCATION: (13)
216 <223> OTHER INFORMATION: Residue may be Met or Asn
217 <400> SEQUENCE: 11
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219 5 10 15
220 <210> SEQ ID NO 12
221 <211> LENGTH: 18
222 <212> TYPE: PRT
223 <213> ORGANISM: Mycoplasma hyopneumoniae
224 <220> FEATURE:
225 <221> NAME/KEY: Unsure
226 <222> LOCATION: (3)
227 <223> OTHER INFORMATION: Undetermined
W-~~228~~ <400> SEQUENCE: 12
229 Ala Gly Xaa Leu Gln Lys Asn Ser Leu Leu Glu Glu Val Trp Tyr Leu
230 5 10 15
231 Ala Leu
232 <210> SEQ ID NO 13
233 <211> LENGTH: 20
234 <212> TYPE: PRT
235 <213> ORGANISM: Mycoplasma hyopneumoniae
236 <400> SEQUENCE: 13
237 Ala Lys Asn Phe Asp Phe Ala Pro Ser Ile Gln Gly Tyr Lys Lys Ile
238 5 10 15
239 Ala His Glu Leu
240 20
241 <210> SEQ ID NO 14
242 <211> LENGTH: 12
243 <212> TYPE: PRT
244 <213> ORGANISM: Mycoplasma hyopneumoniae

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Input Set: H913430B.RAW

Line	?	Error/Warning	Original Text
116	W	"N" or "Xaa" used: Feature required	Ala Gly Xaa Gly Gln Thr Glu Ser Gly Ser T
152	W	"N" or "Xaa" used: Feature required	Ala Gly Xaa Trp Ala Lys Glu Thr Thr Lys G
187	W	"N" or "Xaa" used: Feature required	Met Lys Leu Ala Lys Leu Leu Lys Gly Phe X
218	W	"N" or "Xaa" used: Feature required	Ala Asp Pro Xaa Xaa Tyr Xaa Pro Gln Gly X
229	W	"N" or "Xaa" used: Feature required	Ala Gly Xaa Leu Gln Lys Asn Ser Leu Leu G
265	W	"N" or "Xaa" used: Feature required	Leu Leu Lys Ala Glu Xaa Asn Lys Xaa Ile G
281	W	"N" or "Xaa" used: Feature required	acnaacgacg agaagccnca ggc
299	W	"N" or "Xaa" used: Feature required	ttnagcttng tgatngcctg ctc
309	W	"N" or "Xaa" used: Feature required	aggtcgatga tcttccancc